UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549



FORM 11-K

ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE **SECURITIES EXCHANGE ACT OF 1934**

(Mark One):

_X _ ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the plan year ended December 31, 2003

OR

TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from _____ to

Commission file number 1-9576

PROCESSED JUN 29 2004

Α. Full title of the plan and the address of the plan, if different from that of the issuer named below:

FIFTH AMENDED AND RESTATED OWENS-ILLINOIS, INC. LONG-TERM SAVINGS PLAN

B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

OWENS-ILLINOIS, INC. One Seagate Toledo, Ohio 43666



REQUIRED INFORMATION

Financial Statements and Exhibits as follows:

- 1. Financial statements
 - * Report of Independent Registered Public Accounting Firm
 - * Statements of Net Assets Available for Benefits as of December 31, 2003 and December 31, 2002
 - * Statements of Changes in Net Assets Available for Benefits, with Fund Information for the years ended December 31, 2003 and December 31, 2002
 - Notes to Financial Statements

Schedule

Schedule H, Line 4i – Schedule of Assets (Held at End of Year)

Exhibits:

Exhibit 23 Consent of Independent Registered Public Accounting Firm

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Administrator of the Plan has duly caused this annual report to be signed on its behalf by the undersigned, hereunto duly authorized.

FIFTH AMENDED AND RESTATED OWENS-ILLINOIS, INC. LONG-TERM SAVINGS PLAN

Dated: June 25, 2004

By: Owens-Illinois, Inc.
Employee Benefits Committee
Plan Administrator

By:

Dan W. Pennyw/tt

Chairman

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 333-69624) pertaining to the Sixth Amended and Restated Owens-Illinois, Inc. Stock Purchase and Savings Program, the Fifth Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan, and the Owens-Illinois Specialty Products Puerto Rico, Inc. Long-Term Savings Plan of our report dated June 25, 2004, with respect to the financial statements and schedule of the Sixth Amended and Restated Owens-Illinois, Inc. Stock Purchase and Savings Program included in this Annual Report (Form 11-K) for the year ended December 31, 2003.

Ernst a Young. LLP

Toledo, Ohio June 25, 2004

Audited Financial Statements and Schedule

Fifth Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan

Years ended December 31, 2003 and 2002 with Report of Independent Registered Public Accounting Firm

Audited Financial Statements and Schedule

Years ended December 31, 2003 and 2002

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Report of Independent Registered Public Accounting Firm

Owens-Illinois, Inc. Employee Benefits Committee Fifth Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan

We have audited the accompanying statements of net assets available for benefits of the Fifth Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan as of December 31, 2003 and 2002, and the related statements of changes in net assets available for benefits for the years then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan at December 31, 2003 and 2002, and the changes in its net assets available for benefits for the years then ended, in conformity with U.S. generally accepted accounting principles.

Our audits were performed for the purpose of forming an opinion on the financial statements taken as a whole. The accompanying supplemental schedule of assets (held at end of year) as of December 31, 2003 is presented for purposes of additional analysis and is not a required part of the financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. This supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in our audits of the financial statements and, in our opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.

Const + Young LLP

June 25, 2004

Statements of Net Assets Available for Benefits

	December 31,		
	2003	2002	
Participant-directed funds	\$142,830,860	\$115,929,039	
Participant loans	16,728,124	15,795,572	
Owens-Illinois Company Stock Fund	48,685,755	55,721,112	
Net assets available for benefits	\$208,244,739	\$187,445,723	

The accompanying notes are an integral part of the financial statements.

Statement of Changes in Net Assets Available for Benefits, with Fund Information

Year Ended December 31, 2003

	Fund Inf		
	Participant Directed Funds	Owens-Illinois Company Stock Fund	Total
Net investment income (loss)	\$ 25,674,819	\$ (10,168,636)	\$ 15,506,183
Contributions:			
Participant	12,554,291	2,945,653	15,499,944
Employer	273,301	3,055,572	3,328,873
Participant withdrawals	(10,457,605)	(2,863,882)	(13,321,487)
Loan repayments	(1,779,929)	1,779,929	-
New loan transfers	2,377,184	(2,377,184)	-
New loan fees	(57,150)	(18,951)	(76,101)
Interfund transfers	(553,928)	553,928	
Plan to plan transfers	(196,610)	58,214	(138,396)
Increase (decrease) in net			
assets available for benefits	27,834,373	(7,035,357)	20,799,016
Net assets available for benefits			
at beginning of year	131,724,611	55,721,112	187,445,723
Net assets available for benefits			
at end of year	\$ 159,558,984	\$ 48,685,755	\$ 208,244,739

The accompanying notes are an integral part of the financial statements.

Statement of Changes in Net Assets Available for Benefits, with Fund Information

Year Ended December 31, 2002

	Fund Inf		
	Participant Directed Funds	Owens-Illinois Company Stock Fund	Total
Net investment income (loss)	\$ (17,459,217)	\$ 18,938,990	\$ 1,479,773
Contributions:			
Participant	13,195,426	2,987,094	16,182,520
Employer	927,523	3,094,787	4,022,310
Participant withdrawals	(11,563,168)	(3,203,383)	(14,766,551)
Loan repayments	(1,631,106)	1,631,106	-
New loan transfers	3,406,699	(3,406,699)	-
Interfund transfers	4,500,804	(4,500,804)	~
Plan-to-plan transfers	(865,352)	(499,663)	(1,365,015)
Increase (decrease) in net			
assets available for benefits	(9,488,391)	15,041,428	5,553,037
Net assets available for benefits			
at beginning of year	141,213,002	40,679,684	181,892,686
Net assets available for benefits			
at end of year	\$ 131,724,611	\$ 55,721,112	\$ 187,445,723

The accompanying notes are an integral part of the financial statements.

Notes To Financial Statements

December 31, 2003 and 2002

1. Plan Description

General

The Fifth Amended and Restated Owens-Illinois, Inc. Long-Term Savings Plan (the "Plan") was adopted by Owens-Illinois, Inc. (the "Company") for the benefit of eligible U.S. hourly employees of the Company and certain of its subsidiaries and affiliates.

The Plan is a defined contribution plan which provides eligible employees, upon completion of a probationary period, the opportunity to make pretax contributions, in specific percentages, within guidelines established by the Company. Participant contributions are immediately fully vested and may be divided at the participant's discretion among the various investment options from 1% to 100%, with no limit on the number of options selected. A participant may elect to change the percentage of compensation to be contributed each pay period; any such changes shall be effective on the next pay period. The following investment options were available to Plan participants at the end of 2003:

Owens-Illinois Company Stock Fund

Harbor Capital Appreciation Fund

Harbor Mid Cap Growth Fund

Harbor Small Cap Growth Fund

Harbor Large Cap Value Fund

Harbor Mid Cap Value Fund

Harbor Small Cap Value Fund

Harbor International Fund

Harbor International Growth Fund

Harbor Bond Fund

Harbor Short Duration Fund

Harbor Money Market Fund

Harbor Trust Stable Value Fund (the Harbor Trust Stable Value Fund replaced the Harbor Trust as an investment option beginning January 1, 2003)

Harbor Investment Mix No. 1

Harbor Investment Mix No. 2

Harbor Investment Mix No. 3

Harbor Investment Mix No. 4

Harbor Investment Mix No. 5

Harbor Investment Mix No. 6

The investment options provide for a wide range of investment opportunities with varying degrees of risk. The Harbor funds are part of the Harbor Fund, a no-load, open-end management investment company, consisting of eleven diversified mutual funds, registered under the Investment Company Act of 1940. Effective January 1, 2003, the Harbor Trust Stable Value Fund replaced the Harbor Trust as an investment option. The Harbor Trust Stable Value Fund is a private trust fund for the benefit of 401(k) participants of the Company and for another company.

Notes To Financial Statements - Continued

Each of the Harbor Investment Mixes consists of different combinations of certain Harbor funds.

The approximate composition of each of the Harbor Investment Mixes at December 31, 2003 is as follows:

	Mix	$ exttt{Mix}$	Mix	Mix	Mix	Mix
	<u>No. 1</u>	No. 2	No. 3	No. 4	<u>No. 5</u>	No. 6
Harbor Capital						
Apreciation						
Fund		4.90%	9.80%	14.70%	19.60%	24.50%
Harbor Mid Cap						
Growth Fund		1.05%	2.10%	3.15%	4.20%	5.25%
Harbor Small Cap						
Growth Fund		1.05%	2.10%	3.15%	4.20%	5.25%
Harbor Large Cap						
Value Fund		4.90%	9.80%	14.70%	19.60%	24.50%
Harbor Mid Cap						
Value Fund		1.05%	2.10%	3.15%	4.20%	5.25%
Harbor Small Cap						
Value Fund		1.05%	2.10%	3.15%	4.20%	5.25%
Harbor Inter-						
national Fund		3.00%	6.00%	9.00%	12.00%	15.00%
Harbor Inter-						
national Growth		2 222	<i></i>			
Fund		3.00%	6.00%	9.00%	12.00%	15.00%
Harbor Bond Fund	70.00%	56.00%	42.00%	28.00%	14.00%	
Harbor Short						
Duration Fund	30.00%	24.00%	18.00%	12.00%	6.00%	
	100 000	100 000	700 000	100 000	700 000	100 000
	100.00%	100.00%	100.00%	<u> 100.00%</u>	100.00%	<u> 100.00%</u>

For certain participants, the Company contributes to the Plan an amount equal to twenty-five percent (25%) of the participant's pretax contributions each pay period, with limitations ranging from one to three percent (1%-3%) of such participant's compensation received during that period. For participants at certain Company facilities, the Company contributes an additional Employer Base Contribution to the Plan of two or three percent (2% or 3%) of the participant's compensation. For participants at a certain Company facility, the Company contributes to the Plan amounts based on a stipulated rate per For participants at certain plastics packaging facilities, an additional \$2.75 per week is contributed by the Company. All Company contributions are specified by various labor contracts and are immediately fully vested. All Company contributions, with the exception of contributions for participants at a certain facility, are invested in the Owens-Illinois Company Stock Fund. Company contributions not invested in the Owens-Illinois Company Stock Fund are invested in accordance with the participant's current choice of investment options. Through March 31, 2002, Company matching contributions to the Company Stock Fund were not transferable while a participant was employed by the Company. Effective April 1, 2002, the Plan was amended to allow participants to transfer Company matching contributions from the Company Stock Fund while employed by the Company.

Notes To Financial Statements - Continued

Within certain limitations, a participant may also transfer into the Plan a rollover contribution or other assets from another qualified plan.

With certain exceptions, participants may transfer existing fund balances among the various investment funds daily. Beginning May 12, 2003, certain transaction restrictions were placed on the Company Stock Fund. Transactions into the Company Stock Fund will not be permitted until 90 days after the last transfer out. There are no restrictions on the frequency of transfers out of the Company Stock Fund.

The benefit to which a participant is entitled is the benefit that can be provided from the vested value of the participant's account.

Although it has not been expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA) and any collective bargaining agreements.

The above information is intended as a general description of the Plan's operating guidelines. Reference should be made to the Plan document for more specific provisions.

2. Summary of Significant Accounting Policies

Basis of Presentation and Plan Investments

The Plan's investments are held in the Owens-Illinois Master Stock Purchase and Savings Program Trust (the "Trust") administered by State Street Bank and Trust (the "Trustee") and by Citistreet as the recordkeeper (the "Recordkeeper"), along with the assets of another defined contribution plan of the Company. The accompanying financial statements reflect the Plan's total interest in the net assets and transactions of the Trust as allocated by the Recordkeeper and any such other investments and transactions related solely to the Plan. Net assets, as well as earnings and losses, of the Trust are allocated to the Plan based on the sum of the individual accounts of the Plan's participants.

The following table presents the fair value of investments for the Trust:

	December 31,		
	2003	2002	
Investments, at fair value:			
Mutual fund investments	\$334,417,000	\$259,151,000	
Harbor Trust Stable Value Fund	25,245,000		
Harbor Trust	61,306,000	84,901,000	
Owens-Illinois Company Stock Fund	122,013,000	149,876,000	
Total investments	\$542,981,000	\$493,928,000	
Plan's interest in net assets of the Trust	\$191,516,615	\$171,650,151	

Notes To Financial Statements - Continued

The investment earnings/(loss) of the Trust are as follows:

	Year Ended December 31,		
	2003	2002	
Interest and dividends	\$ 9,524,000	\$ 10,312,000	
Mutual fund appreciation (depreciation)	62,108,000	(67,709,000)	
Owens-Illinois Company Stock Fund			
appreciation (depreciation)	(27,304,000)	52,256,000	
Total earnings (loss)	\$ 44,328,000	\$ (5,141,000)	

Plan's interest in earnings/(loss) of the Trust \$ 14,587,687 \$ 471,324

Investment Valuation

Investments in the eleven Harbor funds available to Plan participants and the six Harbor Investment Mixes are valued at the net asset values as established by the Harbor Fund. Company Stock included in the Company Stock Fund is valued at its quoted market price. Guaranteed investment contracts of the Harbor Trust are valued at an amount equal to the sum of contributions and earnings credited less any withdrawals to date (contract value, which approximates fair value). For the investments in the Harbor Trust Stable Value Fund, which does not have an established fair value, the Trustee establishes a daily market value based on daily cash flows and earnings. This daily value is used for the calculation of the daily unit Net Asset Value, after considering cash flows and management fees, as applicable.

Income Tax Status

The Plan was effective October 1, 1986. The Plan was restated on December 7, 2001, effective January 1, 2002. The Internal Revenue Service has issued a determination letter dated July 29, 2003, advising that the restated Plan, as amended through the second amendment, meets the qualification requirements of sections 401(a) of the Internal Revenue Code, as amended (the "Code") and therefore, the related trust is exempt from taxation. Once qualified, the Plan is required to operate in conformity with the Code and ERISA, as amended, to maintain its qualified status. No issues are known to exist with respect to subsequent amendments to the Plan or as to the operation of the Plan that would materially affect the continued qualified status of the Plan.

Plan Expenses

Substantially all Plan expenses are paid by the Company.

Notes To Financial Statements - Continued

Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of certain assets and liabilities and the reported amounts of certain additions and deductions during the reporting period. Actual results could differ from those estimates and assumptions.

Risk and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits.

3. Harbor Trust

Effective January 1, 2003, the Plan no longer allowed participants to direct funds into the Harbor Trust. Effective January 1, 2003, participants were permitted to contribute to the Harbor Trust Stable Value Fund as a replacement for the Harbor Trust. As the Harbor Trust funds mature, they will be reinvested in the Harbor Trust Stable Value Fund unless otherwise directed by the participant.

Prior to January 1, 2003, participant contributions in the Harbor Trust were invested in units of the Harbor Trust, which invested in a commingled fund of guaranteed investment contracts through a collective trust maintained by the Trustee. The Harbor Trust has specific rates of return for contributions made in each of the years through specific dates. Those returns are as follows:

			Contract value, which
Year of	Rate of	Expiration of	approximates fair value, at:
Contribution	Return	Guarantee Period	Dec. 31, 2003 Dec. 31, 2002
1998	6.25%	December 31, 2002	\$ 3,979,628
1999	5.40%	December 31, 2003	\$ 4,059,655 4,411,968
2000	6.60%	December 31, 2004	6,231,372 6,701,558
2001	6.80%	December 31, 2004	5,413,253 5,908,848
2002	4.60%	December 31, 2005	7,397,773 8,682,949
			\$23,102,053 \$29,684,951

Notes To Financial Statements - Continued

4. Loan Fund

The Plan permits participants to borrow a portion of their existing account balances. Loans are made subject to certain conditions and limitations specified in the Plan and are repaid in weekly installments, including interest. The maximum term of loans is five years, with the exception of home loans for the purchase of a primary residence, for which the maximum term is ten years. Participants' loans are collateralized by their account balances. The rate at which loans bear interest is established at the inception of the borrowing, based on the prime rate then being charged by the Trustee plus 1%. Repayments of loans, including the interest portion thereof, are reinvested on the participants' behalf in accordance with their current choice of investment options. Beginning June 1, 2003, participants are charged a transaction fee for each new loan initiated. The amount of the fee is \$50 for a nonresidential loan and \$100 for a residential loan. The fee is deducted from the participant's account when the loan is processed.

Long-Term Savings Plan

Employer Identification No. 22-2781933
Plan No. 017

Schedule H, Line 4i-Schedule of Assets (Held at End of Year)

December 31, 2003

Shares or
Principal Fair

Description Amount Cost Value

*Participant loans -Interest rates
ranging from 5%
to 11%, various

maturity dates

*Party-in-interest